

I-405 Improvement Project

I-405 - A Project's Journey

Transportation 101
February 19, 2004



Washington State
Department of Transportation

State Transportation

Where have we been - a little history

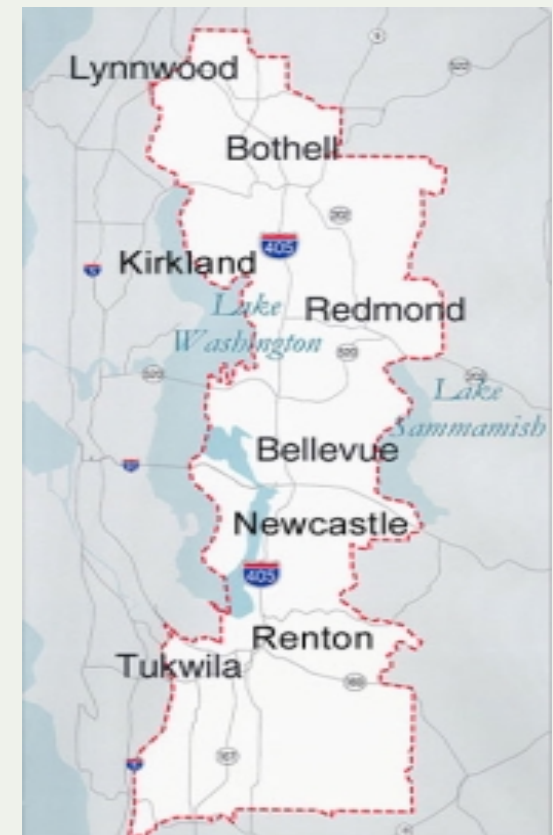
- ❖ R-49 Passed - 1998
- ❖ I-695 Passed - 1999
- ❖ Governor's Blue Ribbon Commission- 2000
- ❖ Four Legislative Sessions - 2001
- ❖ R-51 Failed - 2002
- ❖ Nickel Funding Package - 2003



I-405 Corridor: Growing and on the Move

	<u>1997</u>	<u>2020</u>
Population	564,391	764,660
Employment	408,635	552,724

- 30 mile corridor
- One of the most congested freeways in state
 - *56% growth in daily trips (95-2020)*
 - *10-12 hours of congestion a day*
- A critical to trade and state economy
 - *Washington #1 trade dependent state*
- Essential to Growth Management Program
 - *Investments support smart growth strategies*

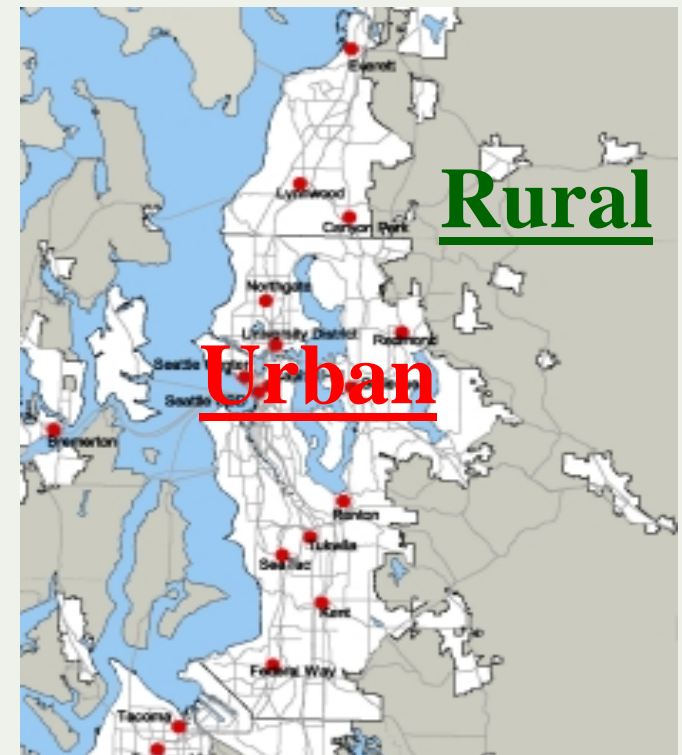


Regional Context



Puget Sound Region has Established Growth Management

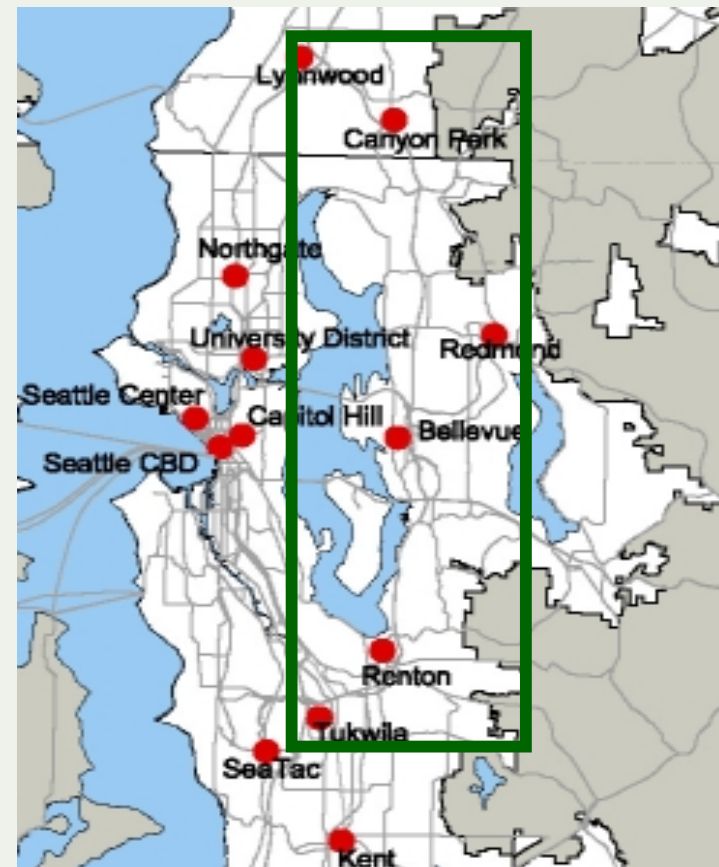
- Reduce sprawl
- Ensure that growth occurs in urban growth boundary
- Preserve rural lands,
- Conserve natural resources, and
- Enable efficient provision of services and facilities.



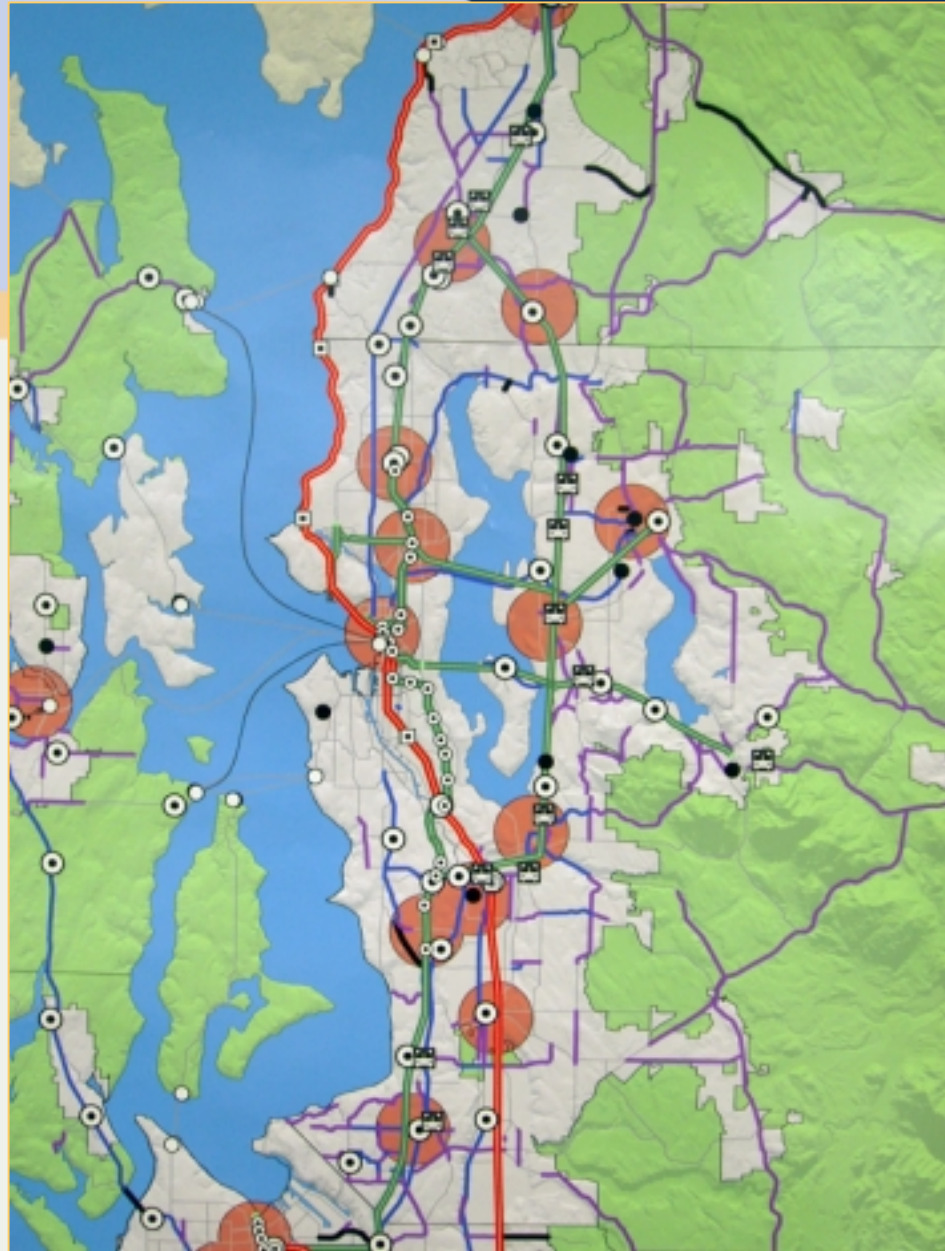
I-405 Located within Urban Growth Boundary

I-405 Provides Connectivity to:

- 2 Counties
- 6 Urban Centers
- 9 Suburban Communities
- 14 Business and Housing Activity Centers

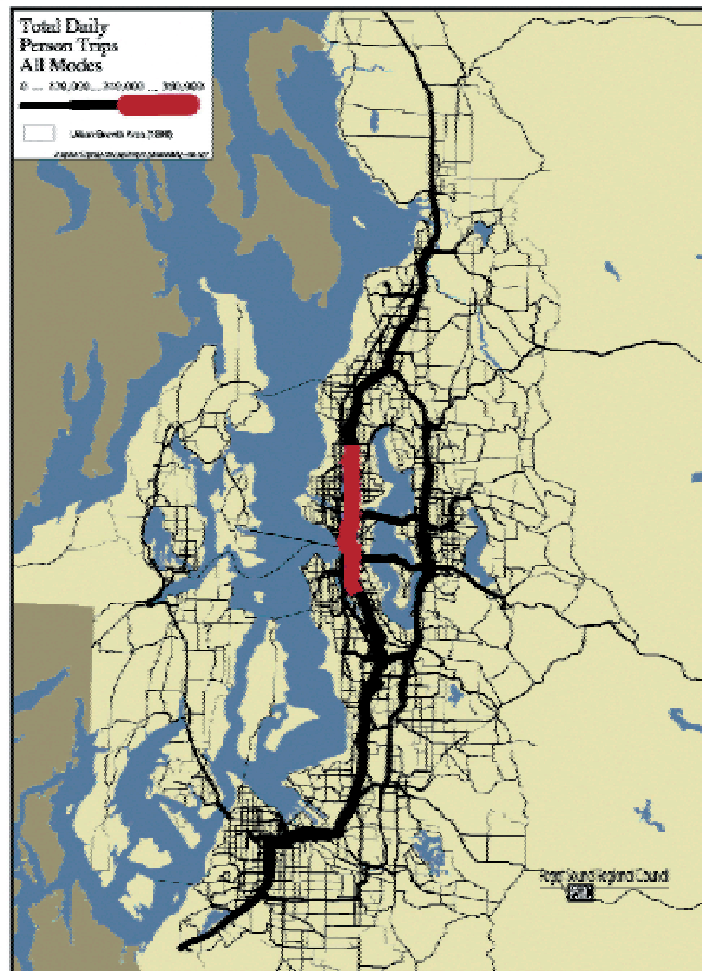


Planned Land Use & Regional Centers

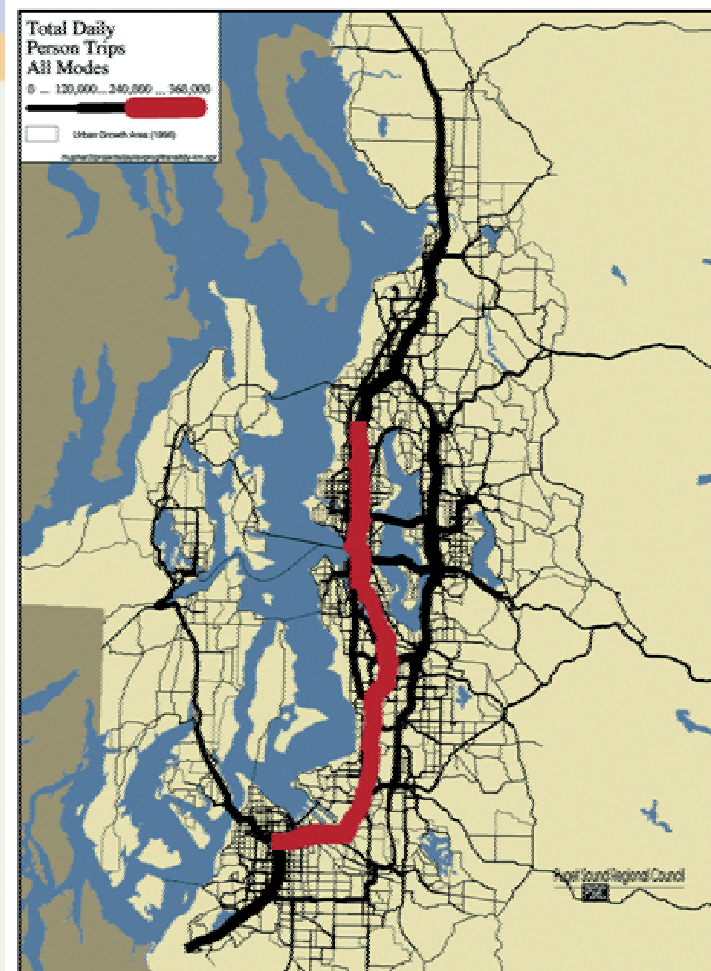


People Moved in the Region

1995 Person Trips

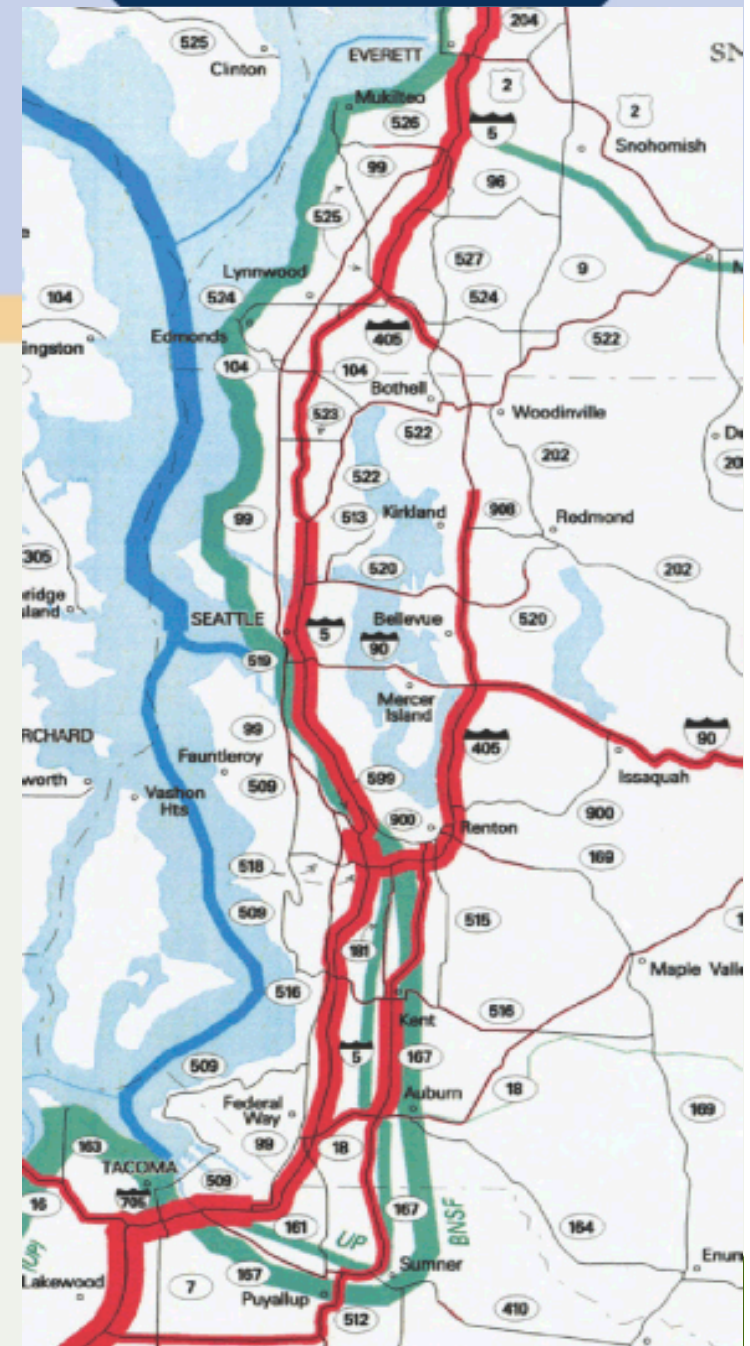


2010 Person Trips



Freight Moved in the Region

I-405 Improvement Project



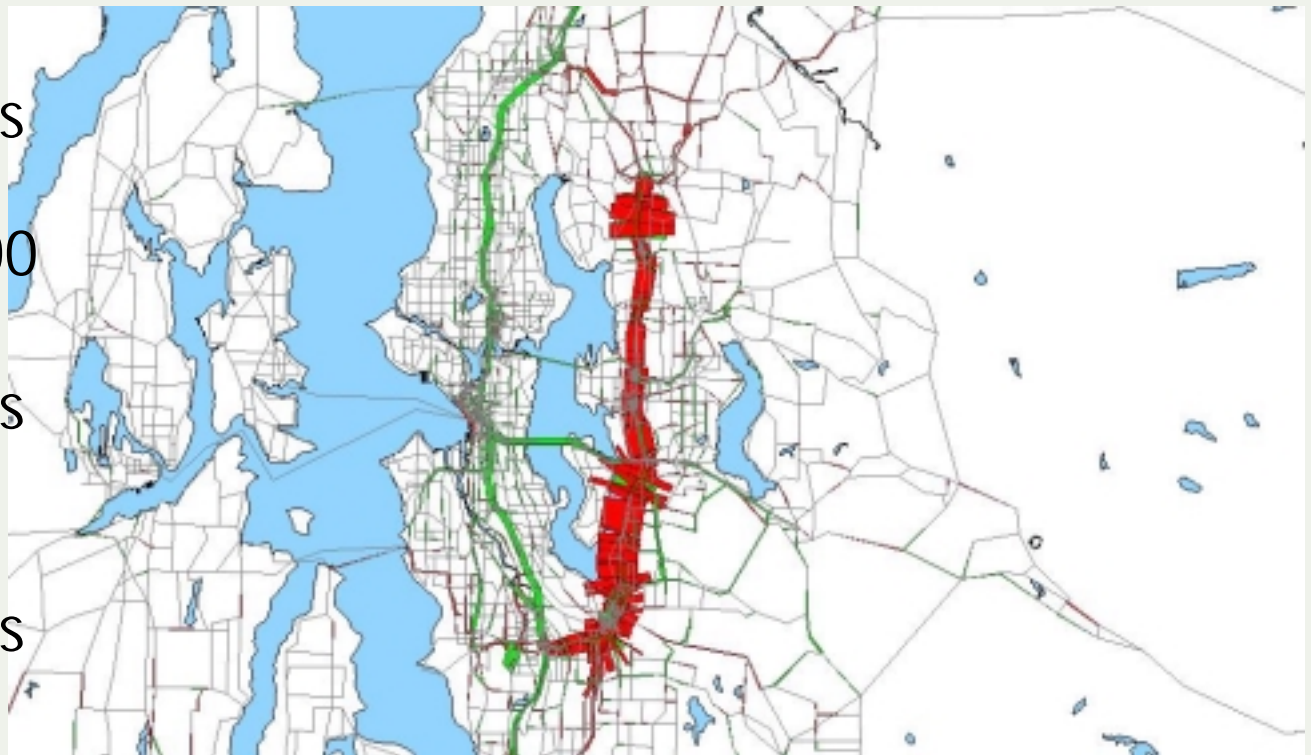
People Using I-405

- ❖ I-405 used by travelers throughout the Region
- ❖ Combination of local and through traffic
- ❖ Complement to I-5 for long distance trips
- ❖ Serves many east-west trips around Lake Washington



Changes in Trip Routes with I-405 Improvements

- Accommodates more daily trips
- Reduces volumes on I-5 through Seattle by 18,000 daily trips
- Reduces volumes across Lake Washington
- Reduces volumes on north-south arterials on eastside



Preferred Alternative Selected

- ❖ In 2002 the project's Executive Committee finalized the vision for I-405. This decision was supported by:
 - ❖ **Cities:** Tukwila, Renton, Newcastle, Bellevue, Kirkland, Redmond, Bothell
 - ❖ **Counties:** King, Snohomish
 - ❖ **Agencies:** Sound Transit, Puget Sound Regional Council, WSDOT, WA. Transportation Commission
 - ❖ **Legislators:** Senators Horn & Prentice, Representative Pflug



Related Program Support

AAA Washington
Associated General Contractors
Bridle Trails Community
Bellevue Chamber of Comm.
Bellevue Downtown Assoc.
Boeing Company
Issaquah Chamber of Commerce
Redmond Chamber of Comm.
Renton Chamber of Commerce
Kirkland Chamber of Comm.
Northshore Chamber of Commerce
Move on 405

" The Boeing Company has been an outspoken advocate of the increased public investment and planning of multi-modal transportation solutions to meet the mobility needs of our operations and for the community at large. We applaud the Department of Transportation's planning efforts within the I-405 corridor.... "



I-405 Master Plan: A Blueprint for the Future

- New Bus Rapid Transit system
- 9 new Transit Centers added
- 50% transit service increase with HOV lane & new direct access ramps
- 5000 new Park and Ride spaces
- 1700 new Vanpools
- 2 new lanes added each direction
- Key chokepoints fixed in Renton, Bellevue, Kirkland, Bothell
- Local arterials improved
- Environmental enhancements



Transportation Demand Management (TDM)

- Increase the number of vanpools (1700 new vehicles), improve public education, expand employer-based programs, and continue analysis of pricing solutions as part of a regional program.

"The Puget Sound region, which boasts the biggest vanpool operation in the nation, has about 1,250 van pools carrying about 11,000 people a day." Seattle Times 10/28/99



High Occupancy Vehicles (HOV)

Complete the series of ramps connecting arterials and freeways directly to HOV lanes on I-405. This allows carpools, vanpools and buses to use the HOV lanes without weaving across other traffic.

During the most congested hours the HOV lanes carry 20% of the people in the Kirkland area.



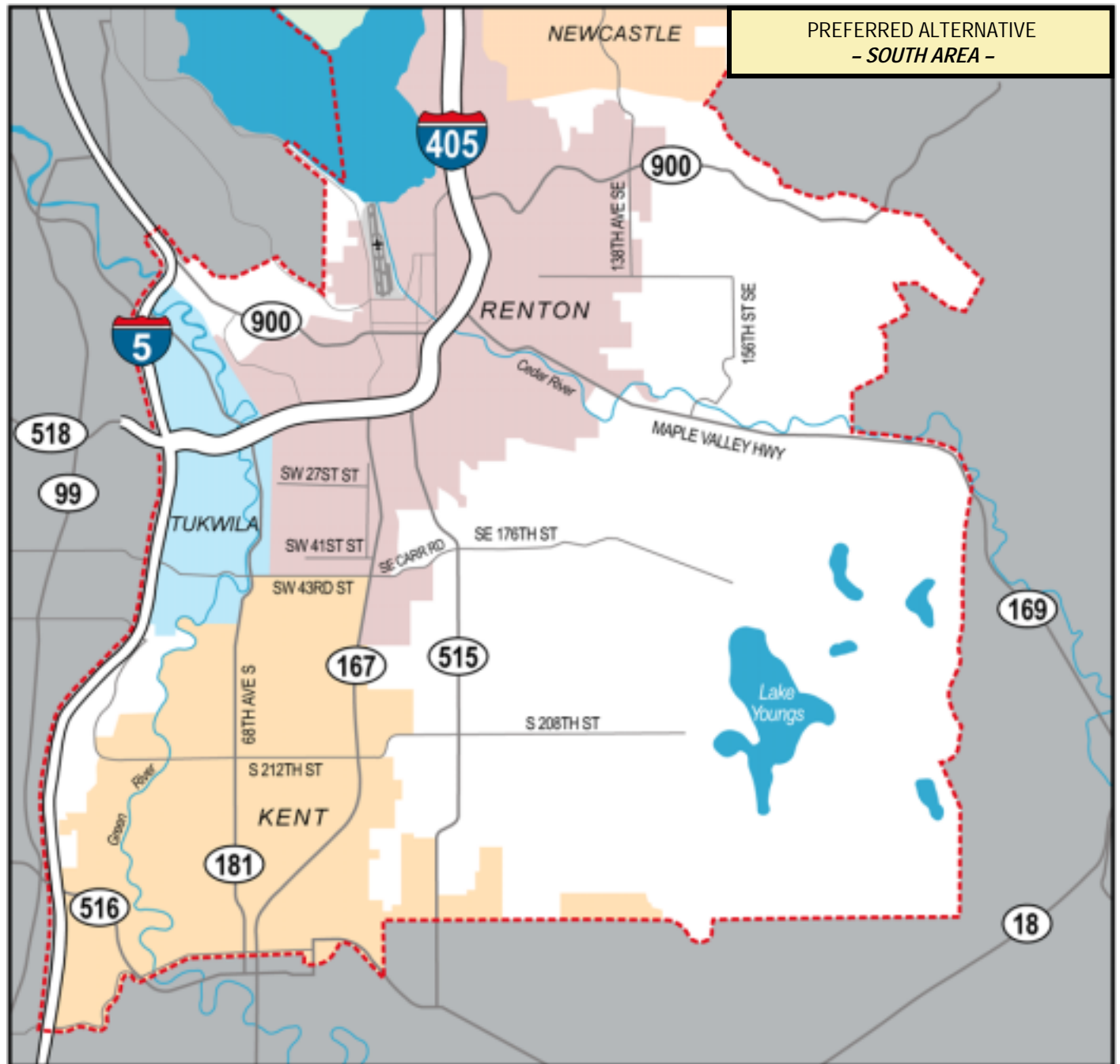
Transit/BRT

Expand transit service (up to 75%) in the corridor; implement a bus rapid transit (BRT) type service for most north-south transit travel; explore automated high capacity transit (Rail or BRT) options for cross-lake (SR 520 & I-90 Corridor).

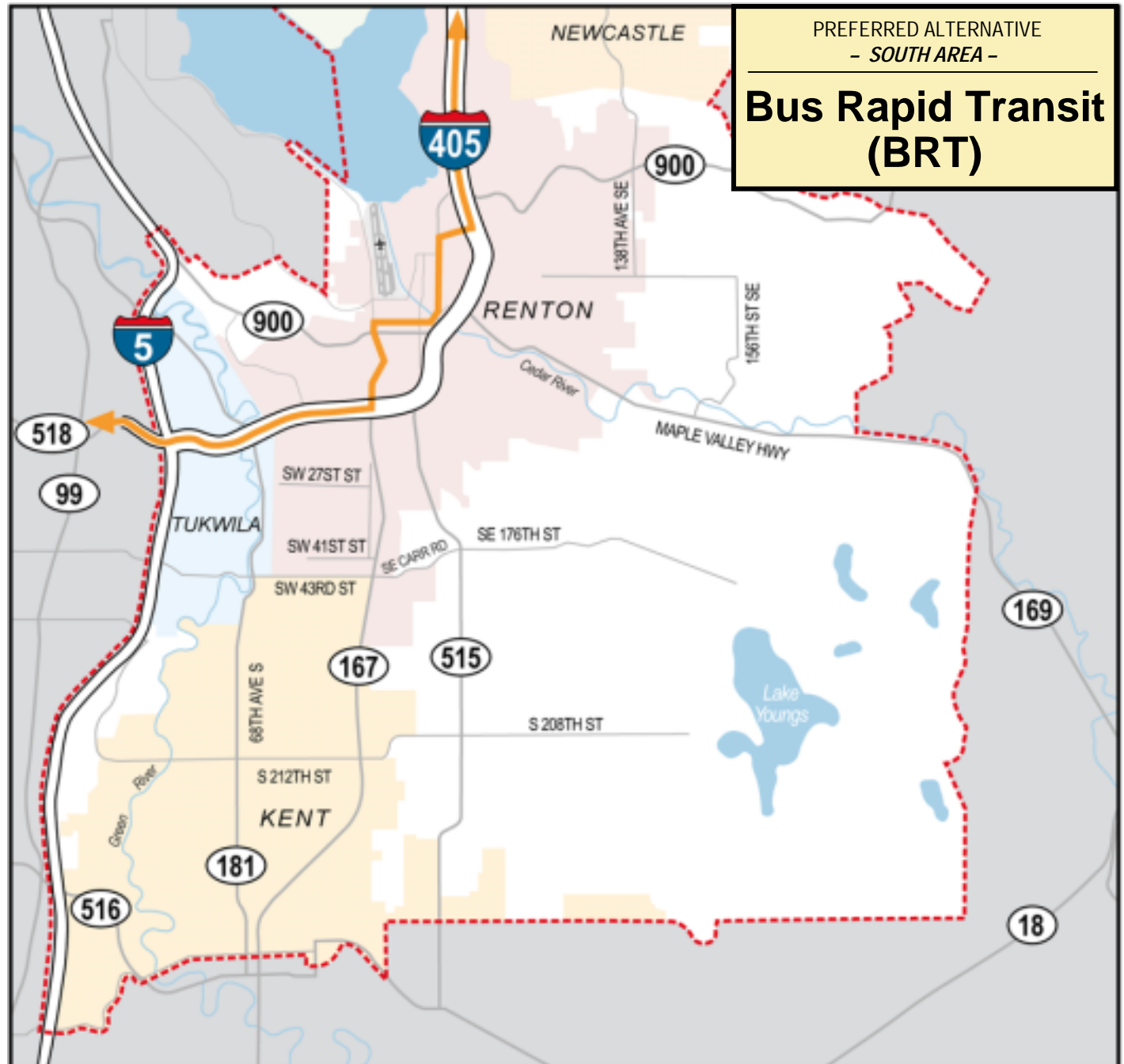
Includes supporting park & ride lot and transit station improvements.



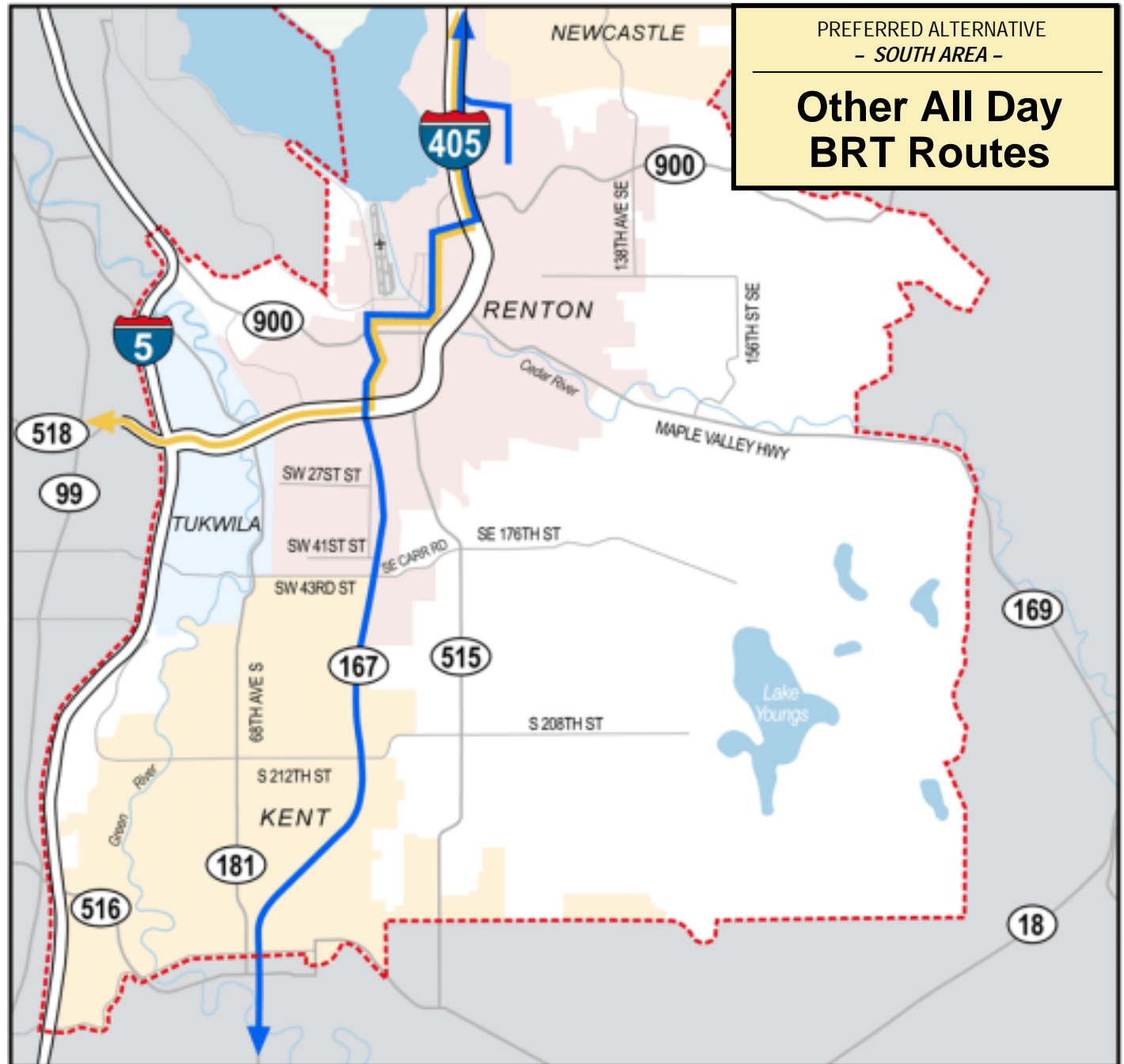
Concept
Bus



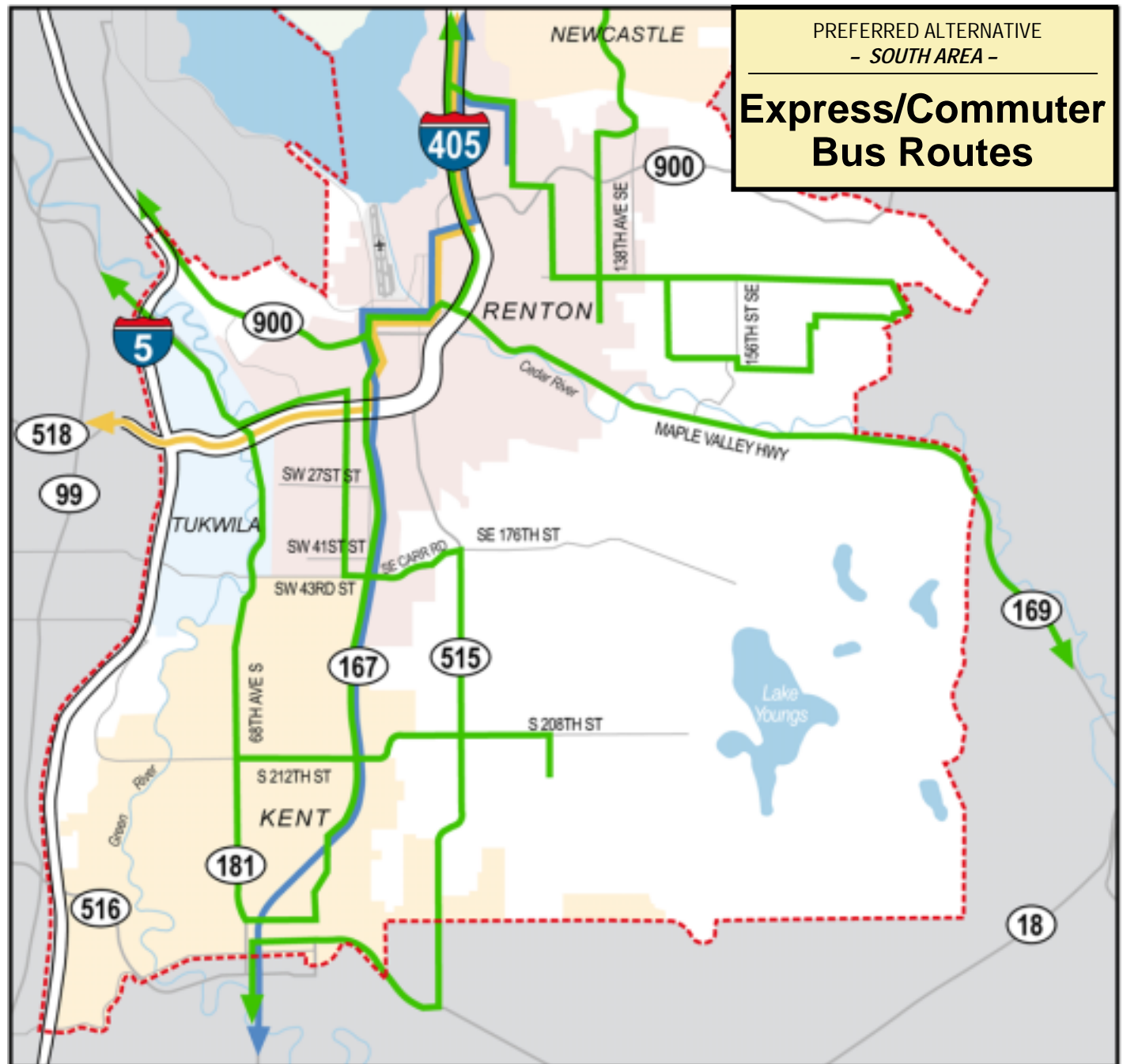
— Bus Rapid Transit (BRT)



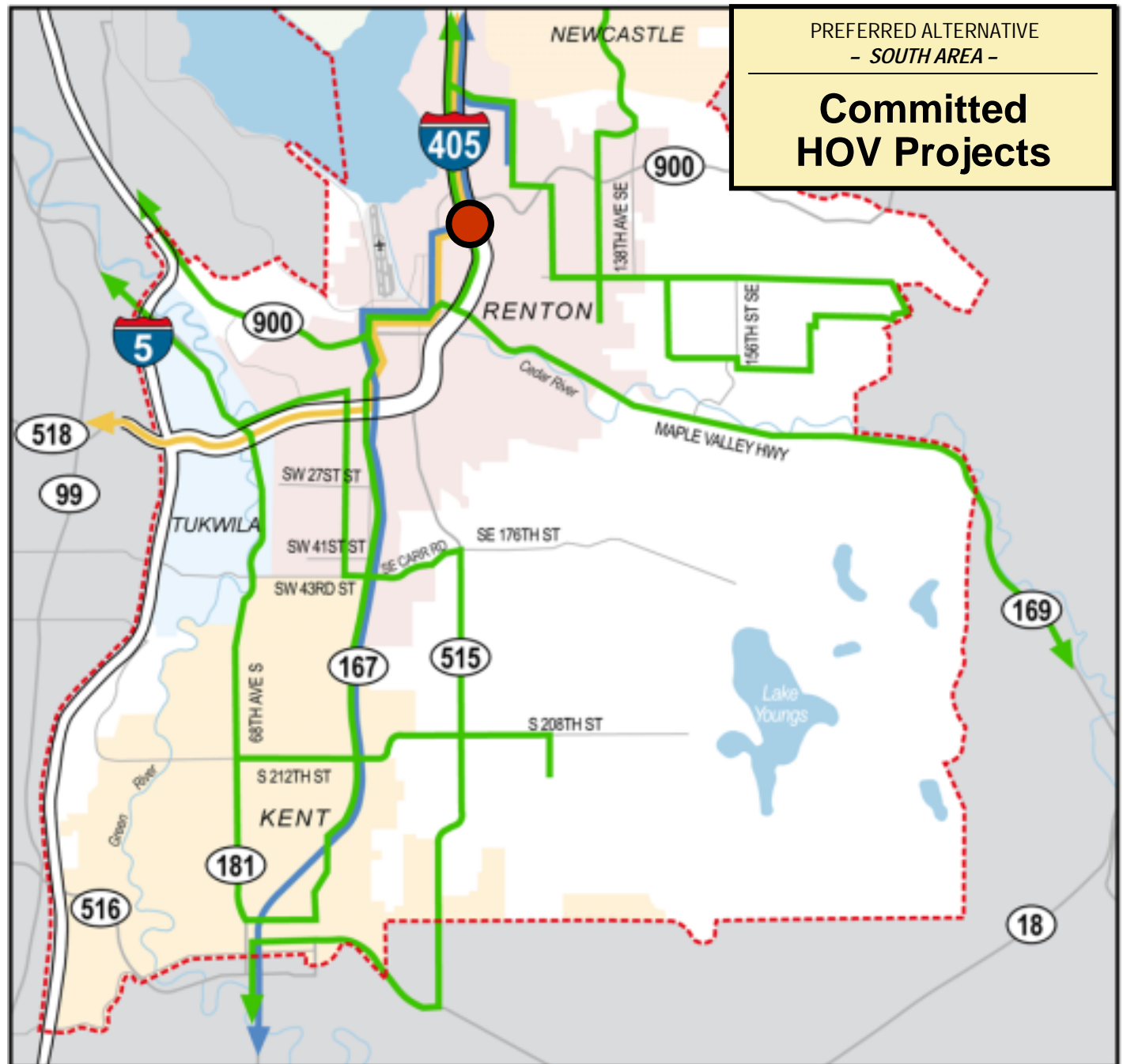
- Bus Rapid Transit (BRT)
- Other All Day BRT Routes



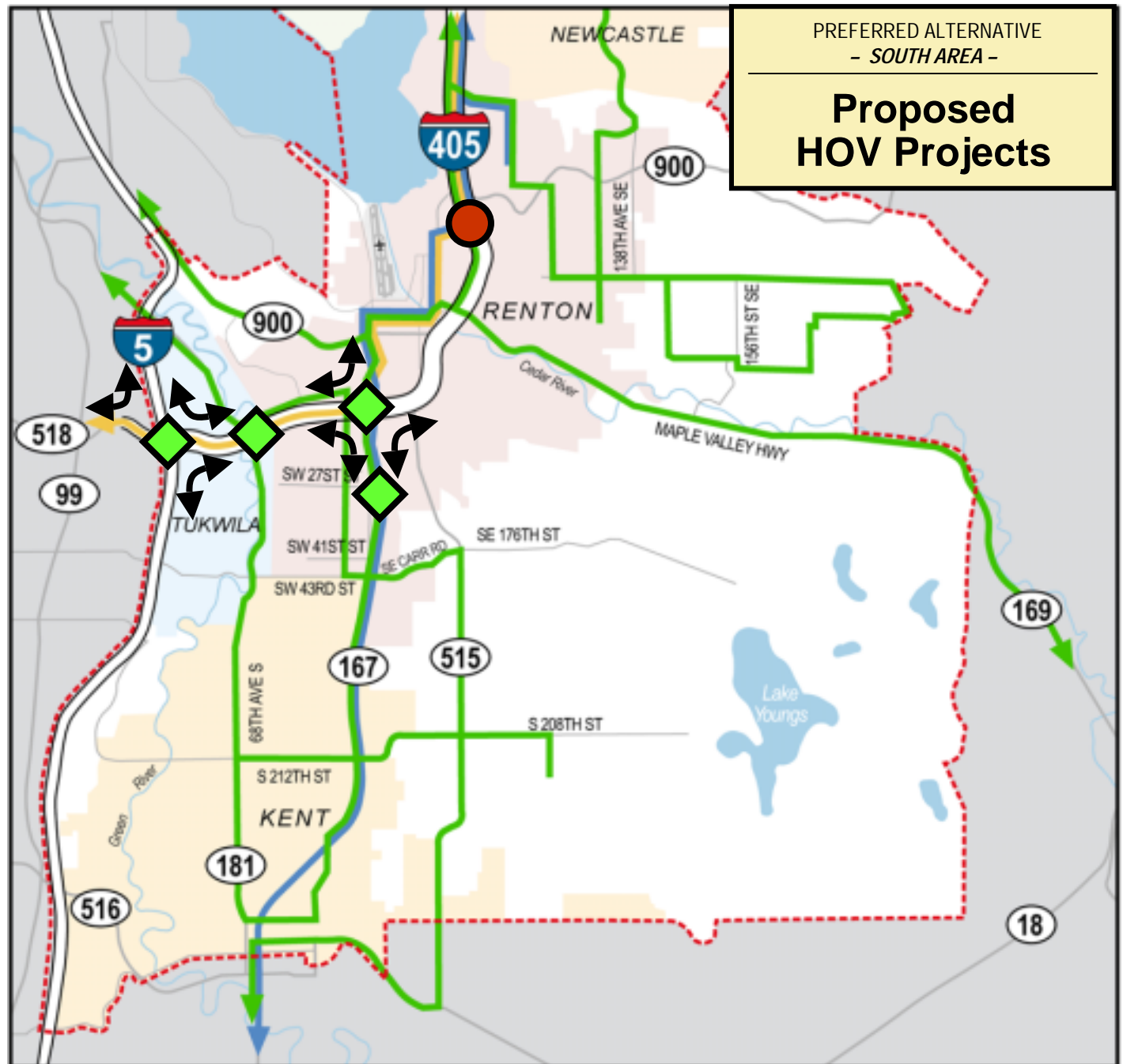
- Bus Rapid Transit (BRT)
- Other All Day BRT Routes
- Express/Commuter Bus Routes



- Bus Rapid Transit (BRT)
- Other All Day BRT Routes
- Express/Commuter Bus Routes
- Committed HOV Projects



- Bus Rapid Transit (BRT)
- Other All Day BRT Routes
- Express/Commuter Bus Routes
- Committed HOV Projects
- ◆ Proposed HOV Projects



— Bus Rapid Transit (BRT)

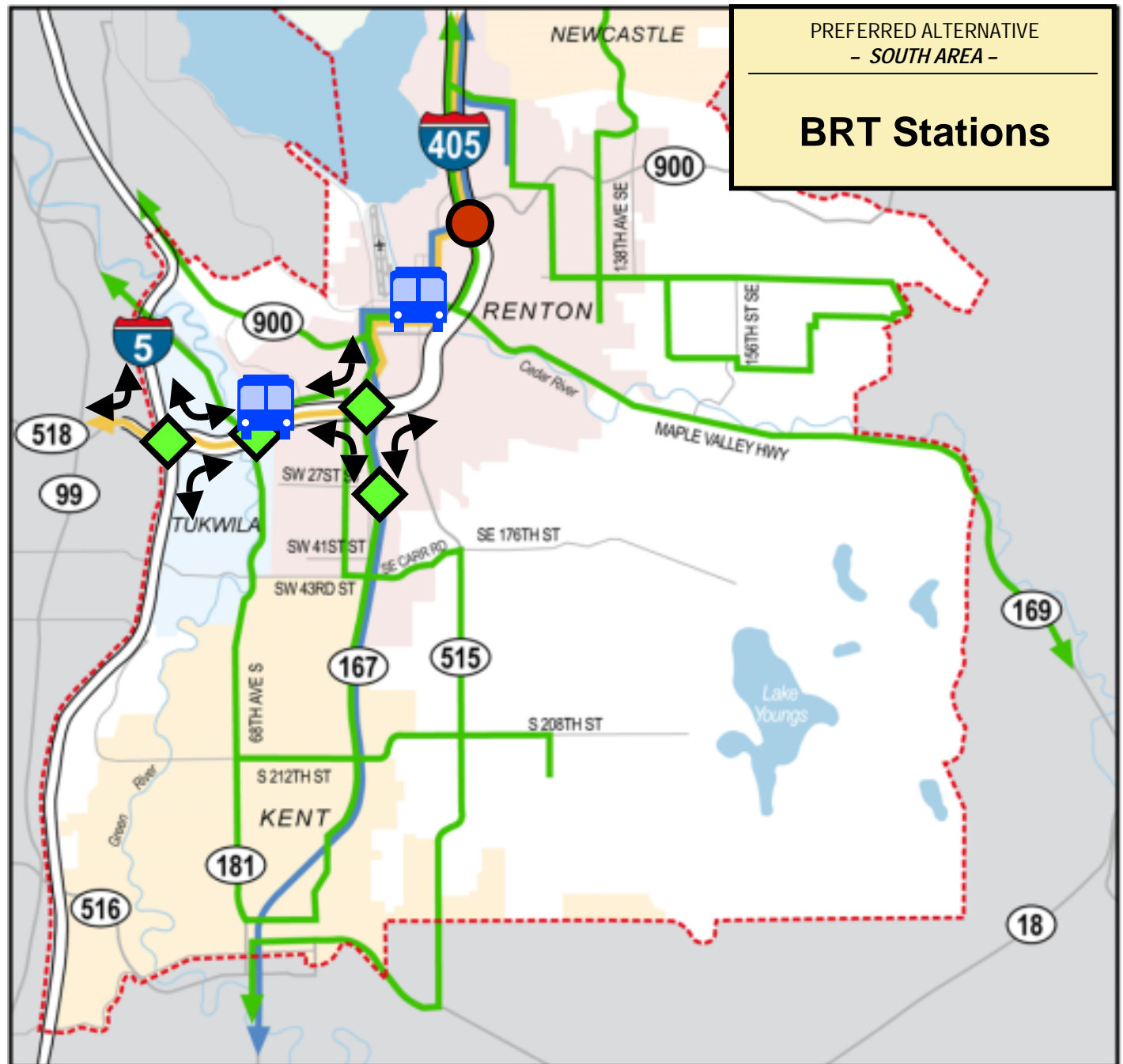
— Other All Day BRT Routes

— Express/
Commuter
Bus Routes

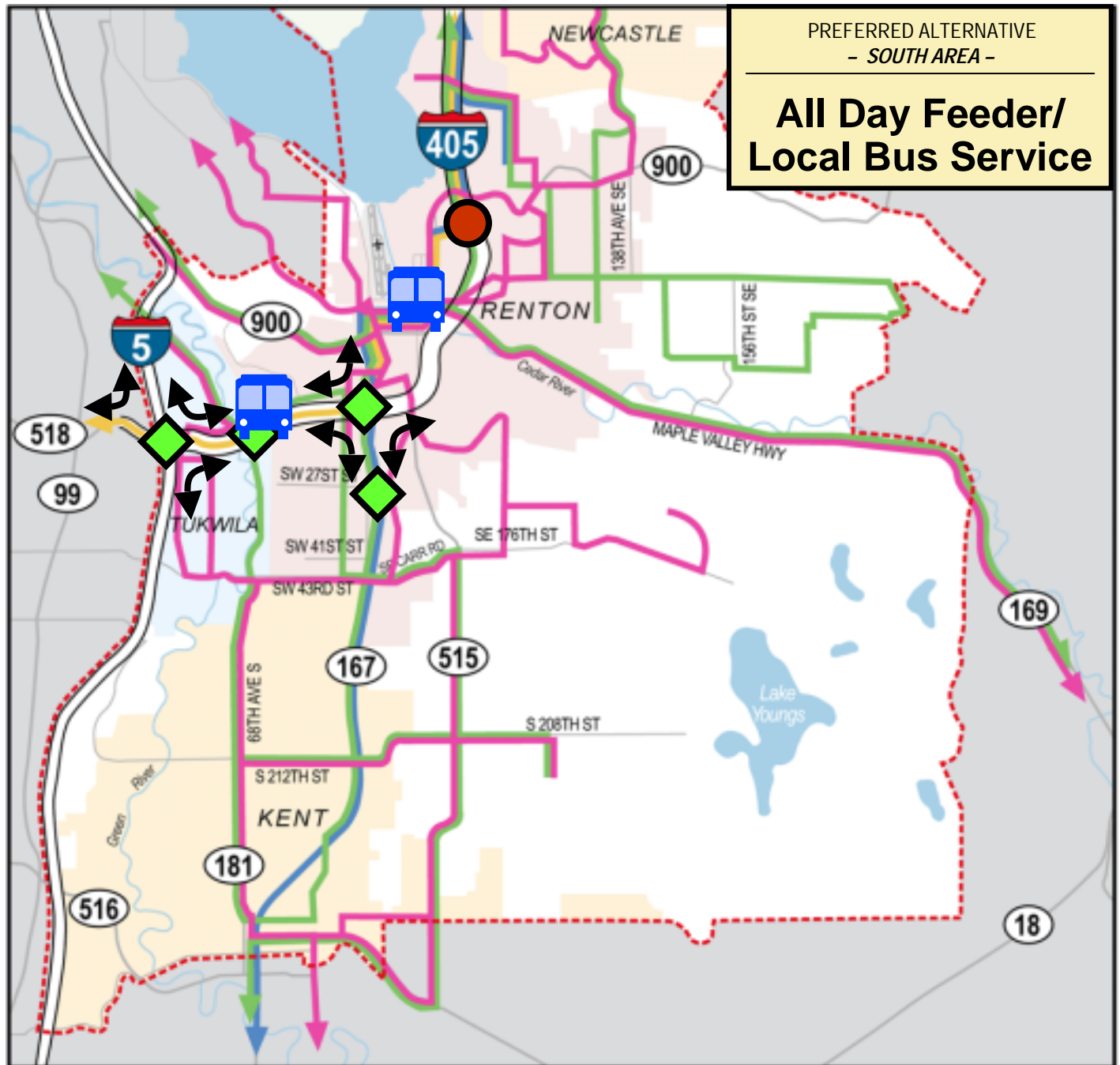
● Committed
HOV Projects









◆ Proposed
HOV Projects

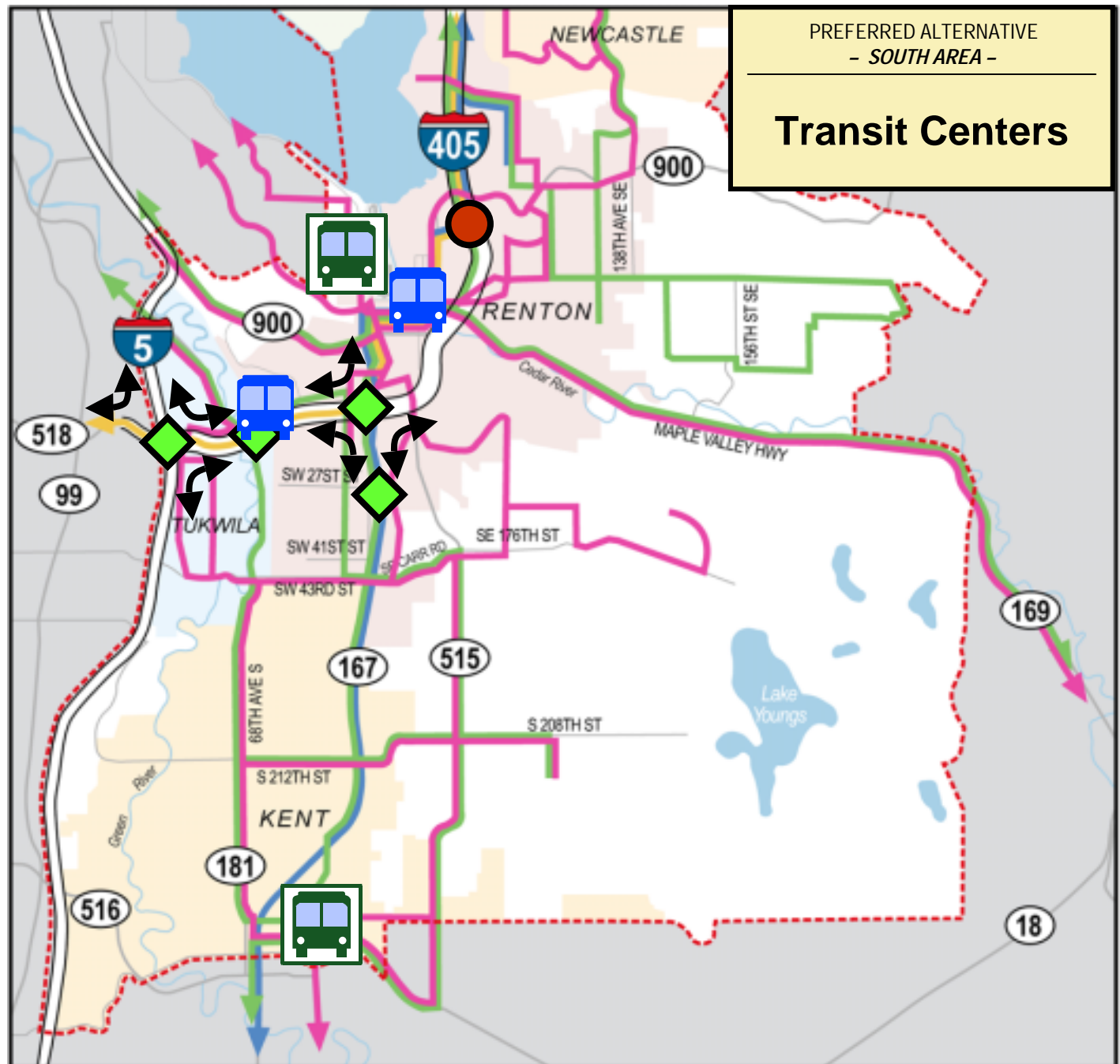
🚌 BRT Stations



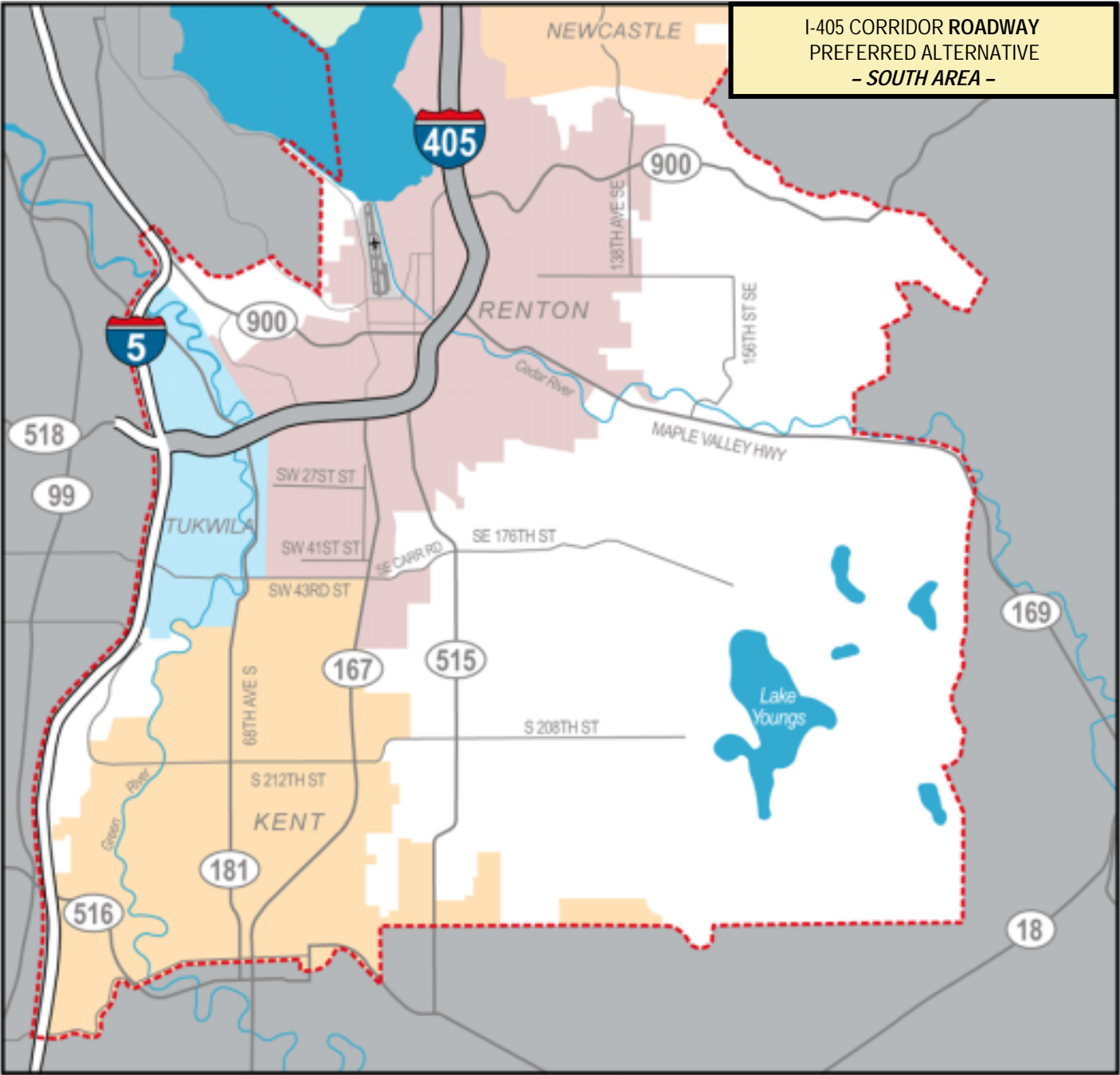
- Bus Rapid Transit (BRT)
- Other All-Day BRT Routes
- Express/Commuter Bus Routes
- Committed HOV Projects
- ◆ Proposed HOV Projects
- 🚌 BRT Stations
- All Day Feeder/Local Bus Service



-  Bus Rapid Transit (BRT)
-  Other All Day BRT Routes
-  Express/Commuter Bus Routes
-  Committed HOV Projects
-  Proposed HOV Projects
-  BRT Stations
-  All Day Feeder/Local Bus Service
-  Transit Centers

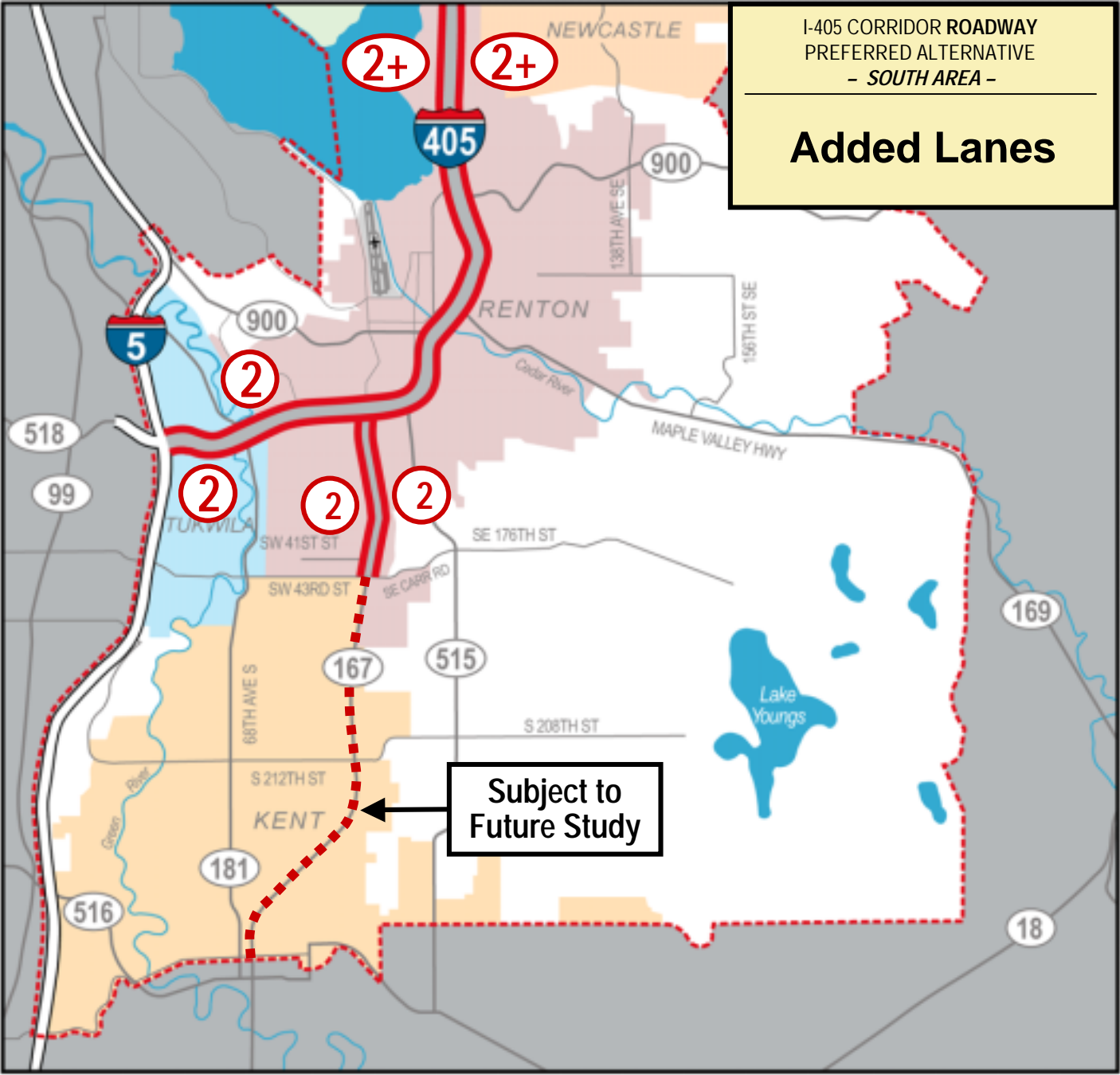


**General
Roadway & Freight**



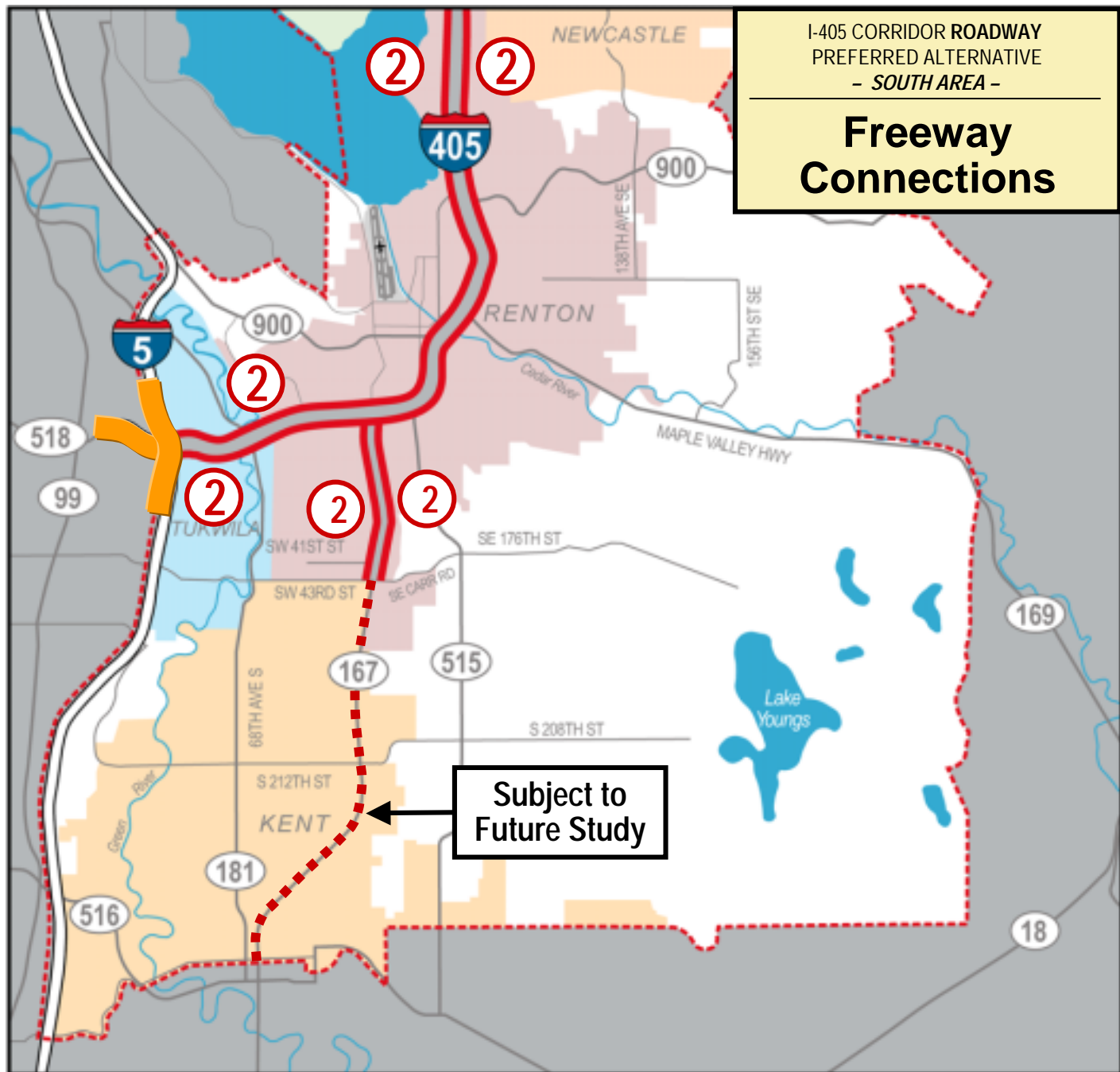
**General
Roadway & Freight**

— Added Lanes



General Roadway & Freight

- Added Lanes
- Freeway Connections

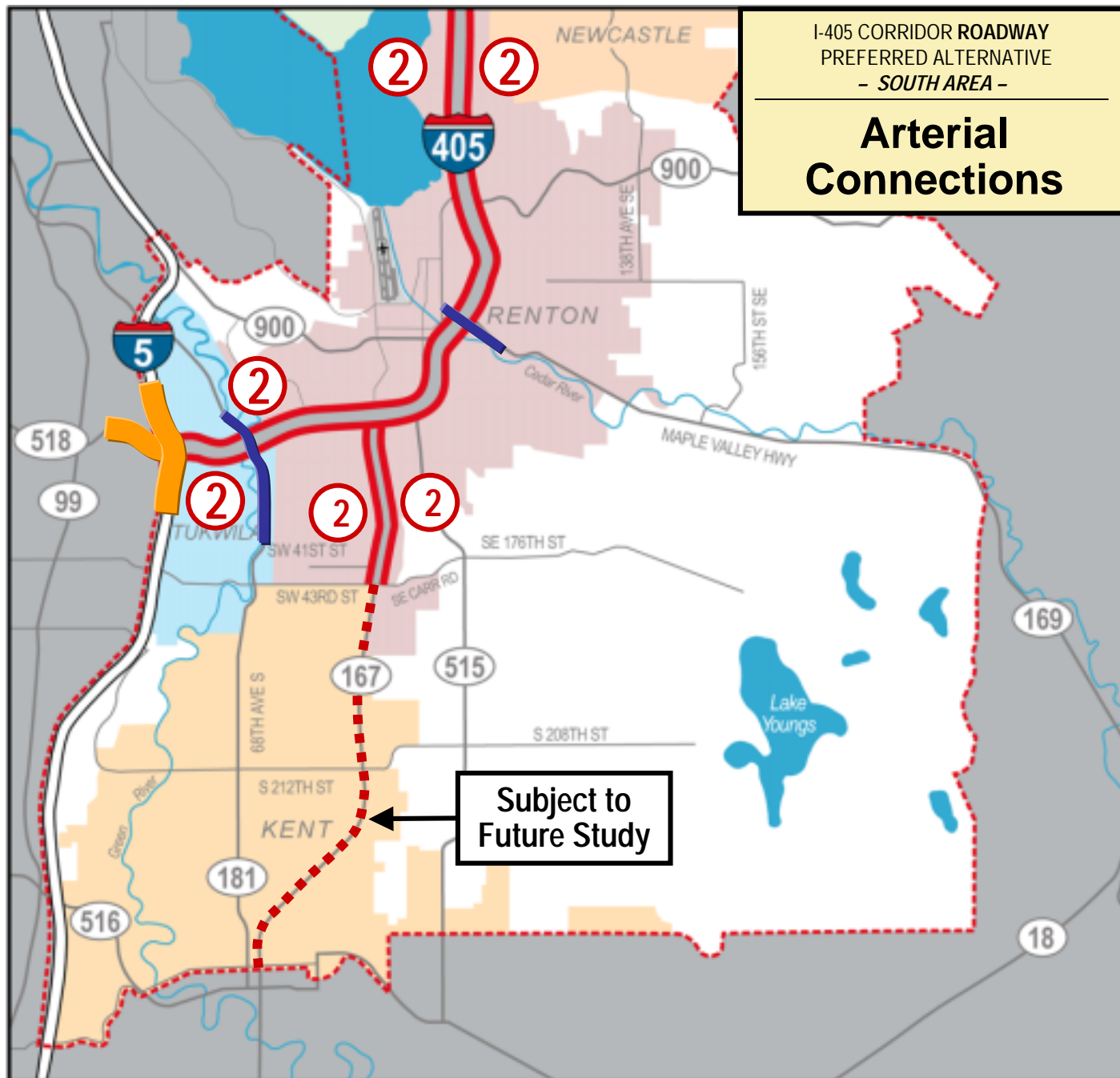


General Roadway & Freight

— Added Lanes

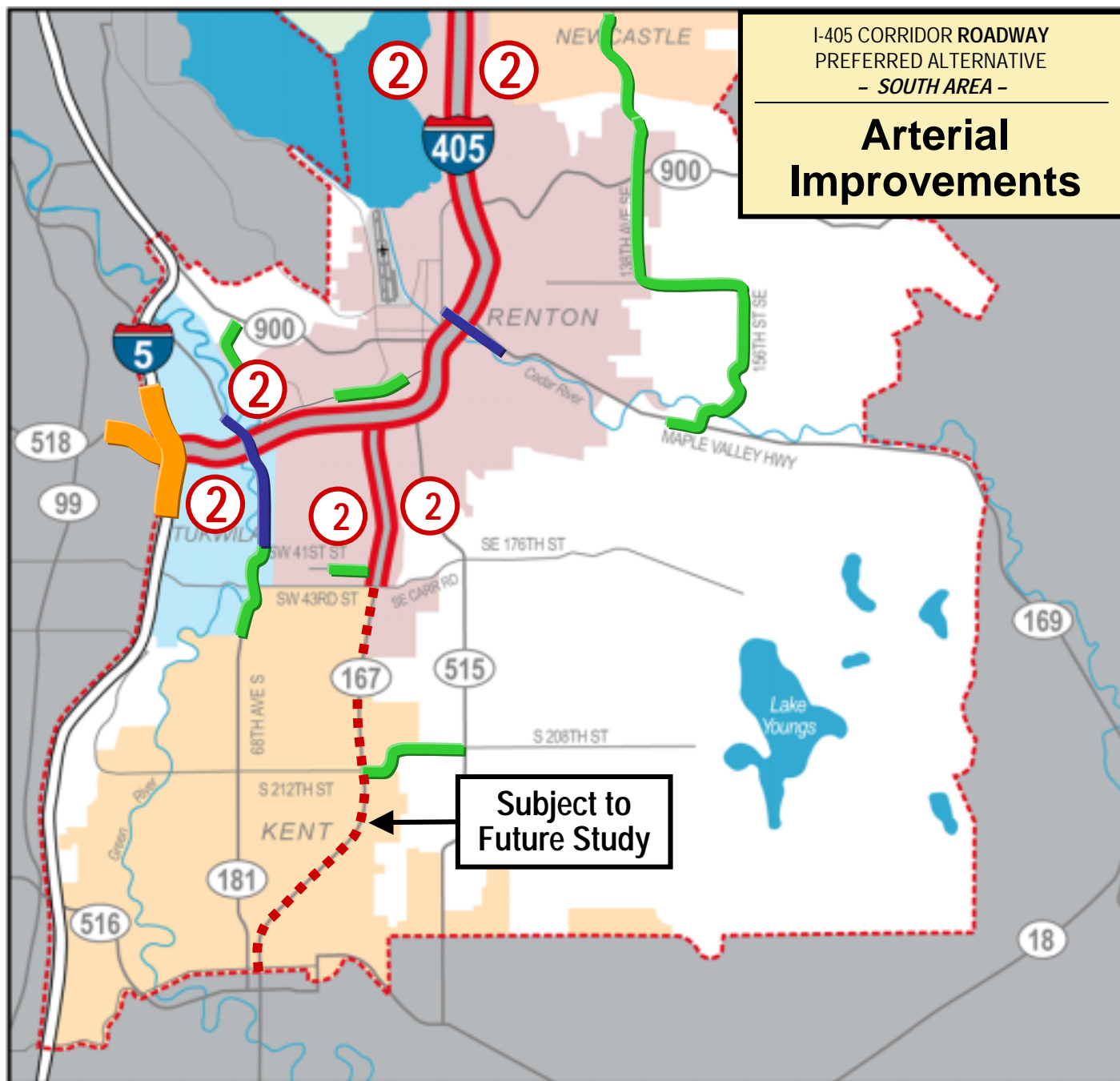
— Freeway
Connections

— Arterial
Connections



General Roadway & Freight

- Added Lanes
- Freeway Connections
- Arterial Connections
- Arterial Improvements

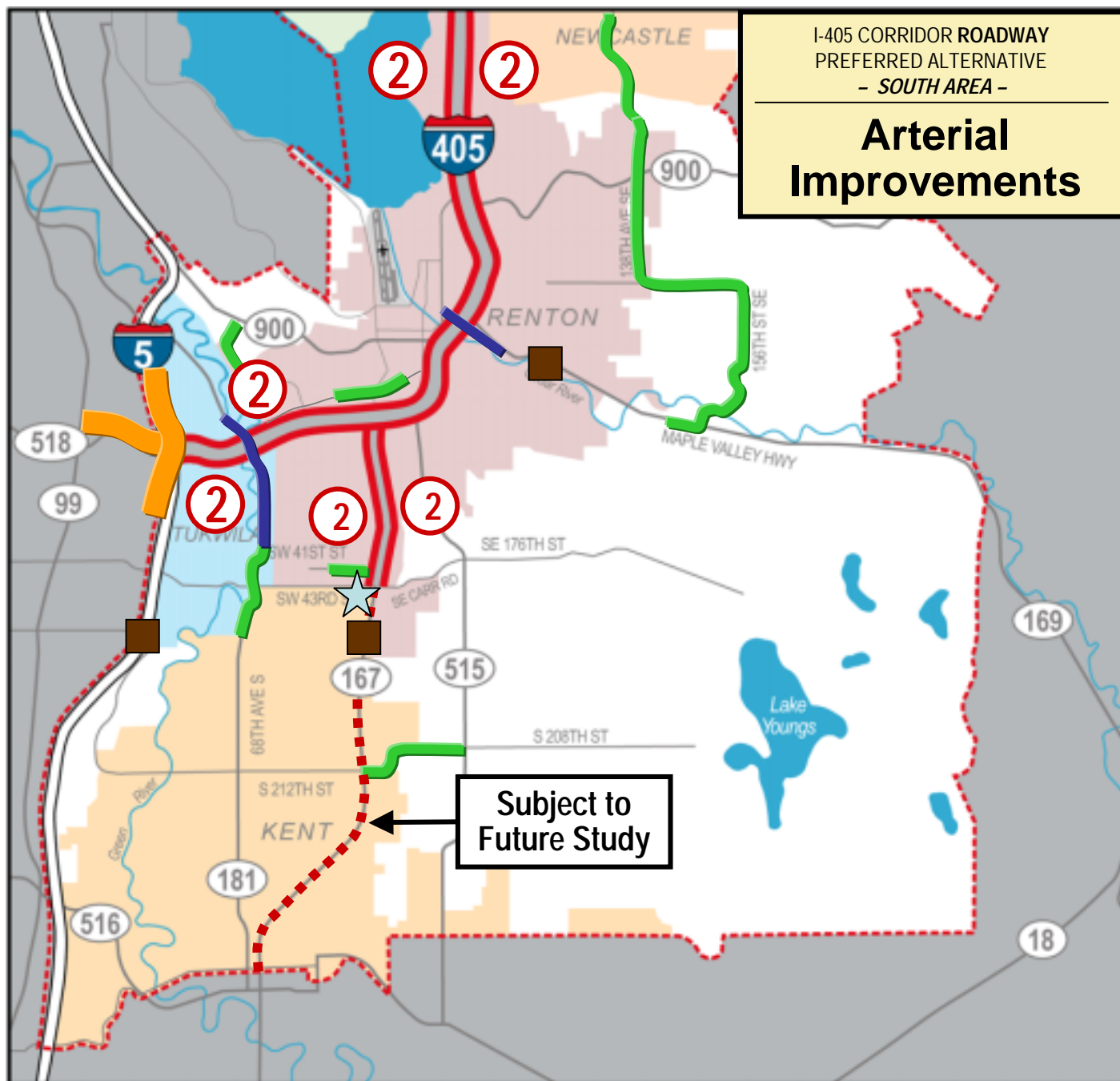


General Roadway & Freight

- Added Lanes
- Freeway Connections
- Arterial Connections
- Arterial Improvements

Other Freight

- Variable Message
- Truck Staging



Total Cost:
\$4.7 Billion

I-405 Implementation Plan

- ⬢ I-405/SR 167 interchange
- ⬢ Renton to I-90
- ⬢ Bellevue's bottleneck
- ⬢ Kirkland's crawl
- ⬢ Canyon Park transit center
- ⬢ Purchase of rapid transit buses & vanpools



Implementation Principles for I-405

Worst First

Fulfill the Vision

Build Logical Segments

Early Environmental Action

Minimize Risk & Delays

Minimize Construction Impacts

Modal Balance

Take Early Actions



It's Your Nickel, Watch it Work!

- Legislature Passed, and Governor Locke signed new Transportation Budget May 19th
- Nickel Funding Package - ten year program
- 13 years since last gas tax
- Formalizes accountability standards
- Reforms regulations for efficiencies
- Specific projects across Washington State

King County “Nickel Projects”

I-405 - Congestion Relief & Bus Rapid Transit (BRT) Projects	\$485
SR 99 - Alaskan Way Viaduct & Seattle Seawall Replacement	\$177
SR 520 W Lake Sammamish Parkway to SR 202 - Add Lanes	\$102
SR 520 - Bridge Replacement & HOV Project	\$56
I-5 Pierce County Line to Tukwila Stage 4 HOV	\$55
SR 519 S Seattle Intermodal Access - Royal Brougham	\$42
SR 167/ 15th Street SW to 15th Street NW - HOV	\$40
SR 509/ I-5 - Freight & Congestion Relief Project	\$35
SR 161/ Jovita Blvd to S. 360th St.- Widen to 5 Lanes	\$26
SR 18 - Issaquah Hobart Rd to I-90 Widening	\$16
I-90 - Two-Way Transit & HOV	\$15
SR 900 SE 78th St to Issaquah - Additional Lanes	\$15
SR 99/ S. 284th to S. 272nd St. - HOV Lanes	\$13
SR 99 Shoreline Aurora Ave - N Corridor Transit/HOV Lanes	\$10
SR 167 - Valley Freeway Expansion Evaluation	\$10
SR 522/Bothell - UW Campus Access	\$8
I-5/ NE 175th St. to NE 205th St. - NB Auxiliary Lane	\$7
SR 522/ I-5 to SR 405 - Multimodal Project	\$5



Nickel Projects

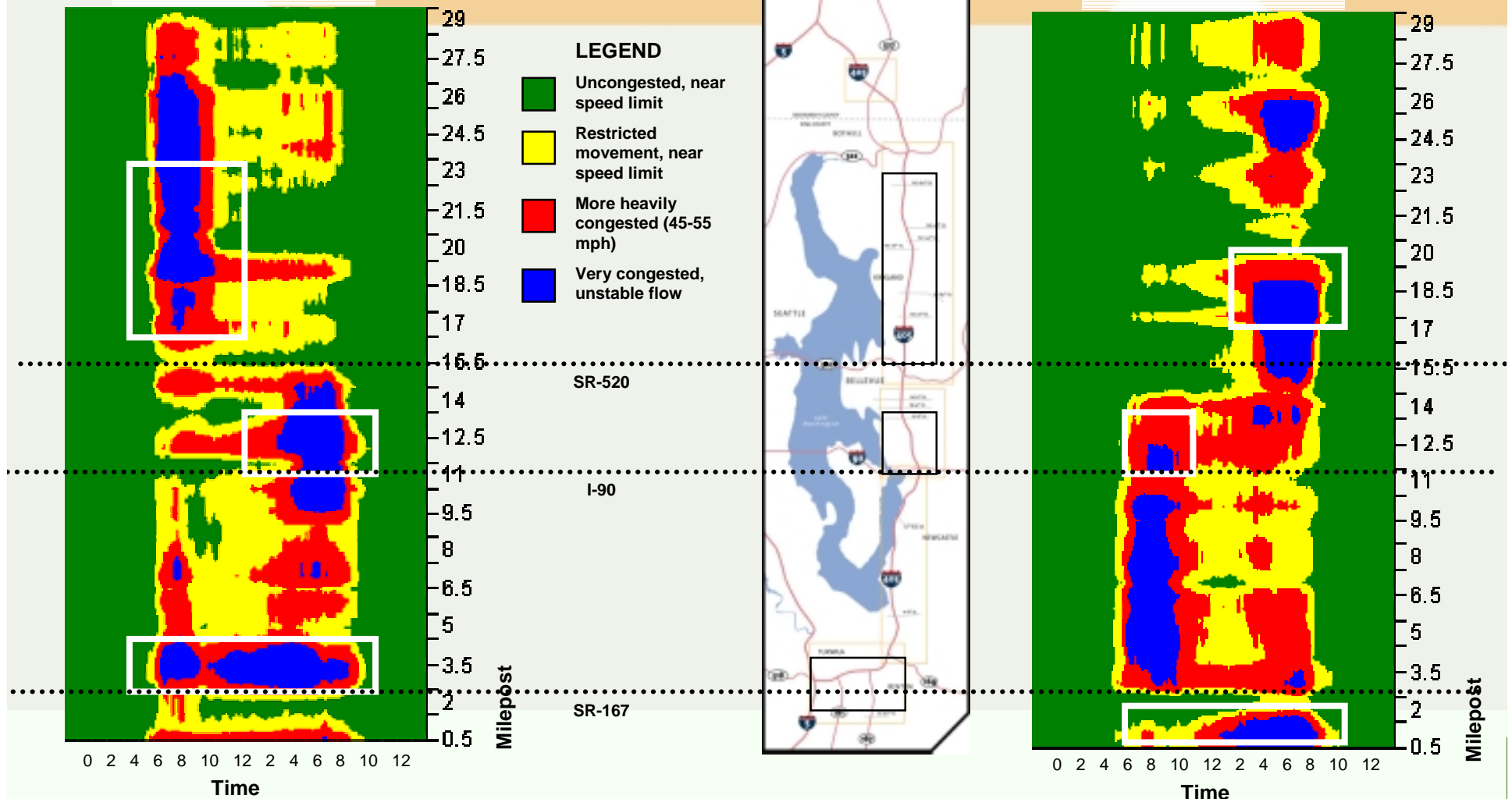
- \$485 million for I-405
- Focus on Kirkland, Renton & Bellevue
- Funds 5% design for corridor
- Funded projects part of 10-year plan
- Can stand alone if RTID delayed



Traffic Hotspots - Nickel Projects

**I-405 Southbound
Tukwila to SR 524
Sept-Dec, 2002**

**I-405 Northbound
Tukwila to SR 524
Sept-Dec, 2002**



Nickel Projects Performance

Nickel Projects
Preliminary Cost Benefits*

**Benefits based on travel time savings and
accident reduction*

B/C = 1.0

3.0

Renton

2.8

Bellevue

10.8

Kirkland

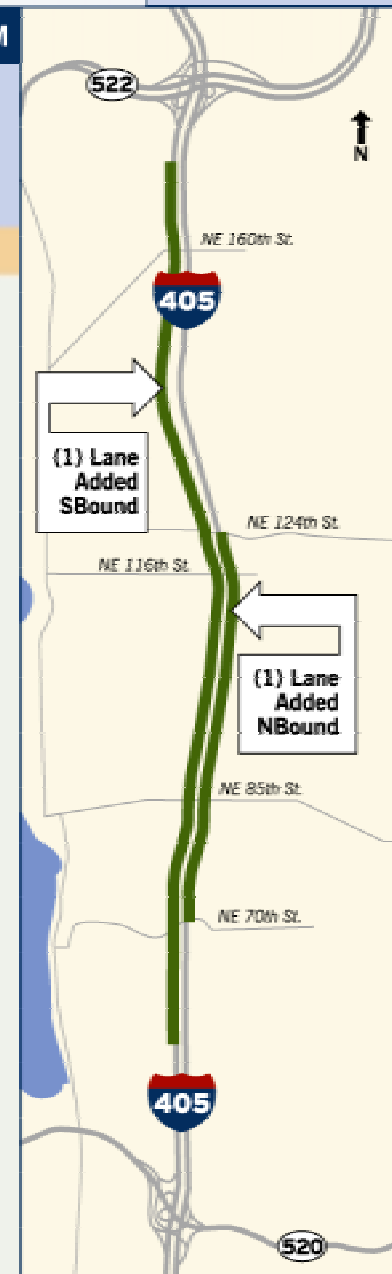


Kirkland Nickel Project

- Extends from SR 522 in Bothell to SR 520 in Bellevue
- Adds one additional SB lane between SR 522 and SR 520
- Adds one additional new NB lane between NE 70th Street to NE 124th Street

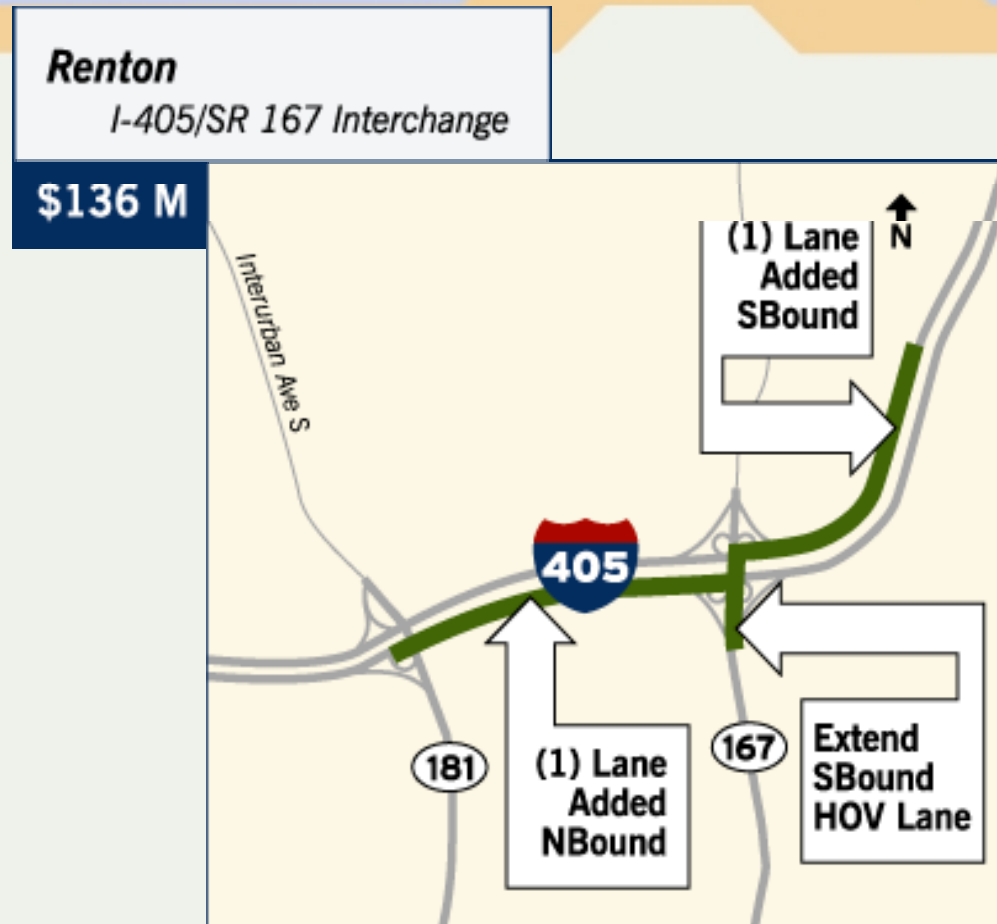
Kirkland
SR 520 – SR 522

\$164 M



S. Renton Nickel Project

- ❖ Extends from the West Valley Hwy to Maple Valley Hwy in Renton
- ❖ One additional NB lane on I-405 from SR 181 to SR 167
- ❖ One additional SB lane from SR 169 to SR 167



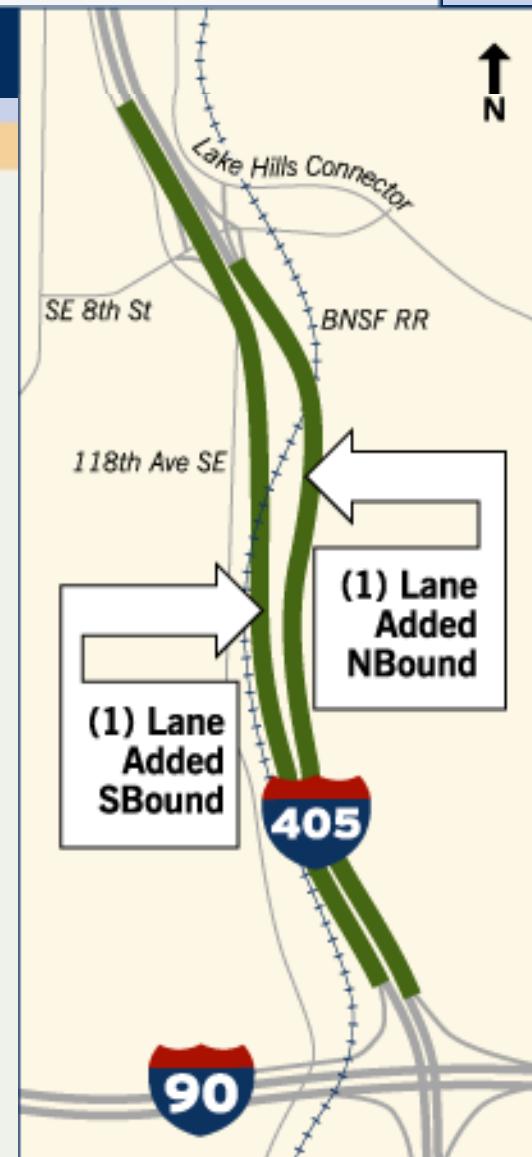
Bellevue Nickel Project

- Extends from SE 8th to I-90 in South Bellevue
- One additional NB lane on I-405 from I-90 to SE 8th
- One additional SB lane from the NE 4th vicinity to I-90
- Improvements to the Wilburton tunnel

Bellevue

I-90 – Downtown Bellevue

\$185 M



I-405 Project Timeline

I-405 Corridor EIS adopted, Master Plan established



I-405 FEIS completed, Federal Record of Decision signed



North Renton Environmental Design Refinements & Scoping Meeting



Potential RTD Public Vote

RTD Passes

Based on RTD Funding Level

Implementation Plan

North Renton

South Renton

Bellevue

Kirkland



Phase I: Nickel Projects

Construction Based on Legislative Funding Schedule

Bellevue

Renton

Kirkland

South Renton

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I-405 Progress Report

Through February 3, 2004

- ❖ 100+ staff people on board
- ❖ 100 on-call staff engaged
- ❖ Co-Location March 1st
- ❖ Nickel environmental process underway
- ❖ Nickel designs on schedule



600 – 108th Avenue NE
Suite 405
Bellevue, WA 98004
425-456-8500



I-405 Corridor Program

1. Address the corridor's worst congestion areas, including freight, transit, and general purpose
2. Enhance the multimodal aspects of I-405 (carpools, vanpools, transit, HOV)
3. Leave the environment better



For More Information

www.wsdot.wa.gov/projects/I-405



I-405 Project Schedule

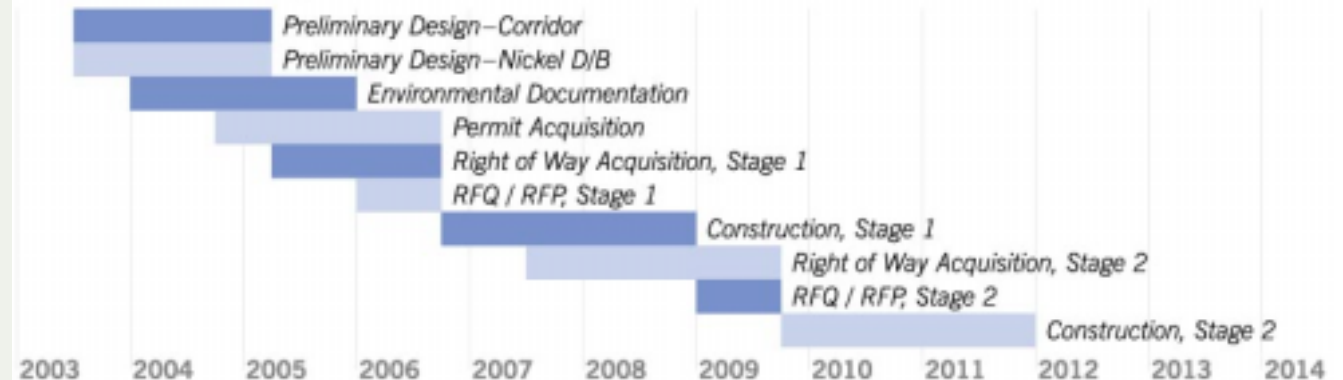
I-405 West Valley Highway to Maple Valley Highway (South Renton)



I-405 SE 8th Street to I-90 (South Bellevue)



I-405 SR 520 to SR 522 (Kirkland)

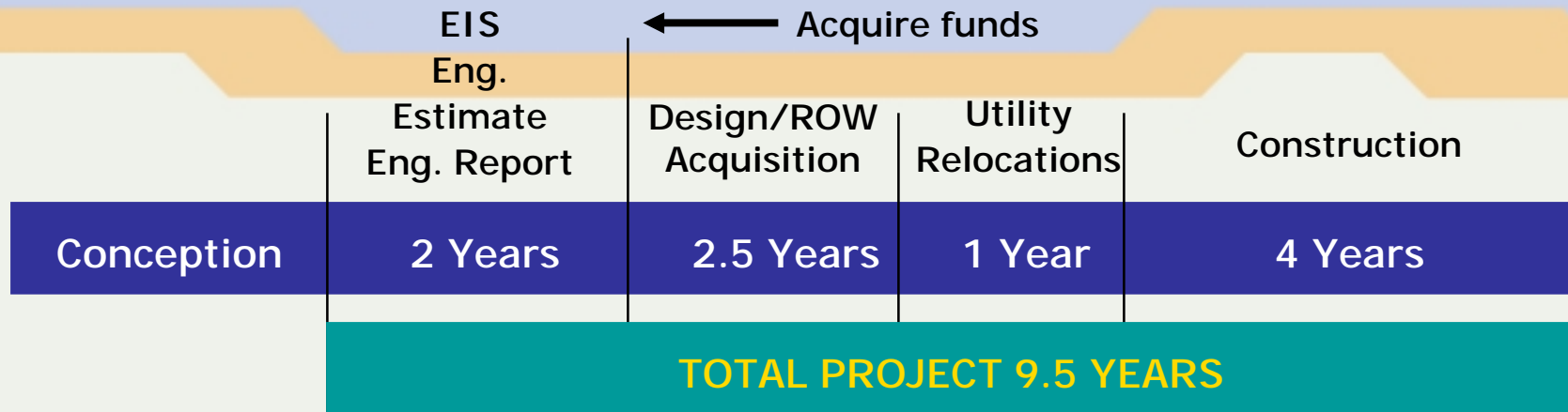


I-405 SR 169 to I-90 (North Renton)





Design-Build Project



I-405 Progress Report

Through February 3, 2004

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- ❖ 100 on-call staff engaged
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